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L11: Entry 1 of 1

File: USPT

Jun 11, 1991

US-PAT-NO: 5023386

DOCUMENT-IDENTIFIER: US 5023386 A

TITLE: Production of hexanitrostilbene (HNS)

DATE-ISSUED: June 11, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Golding; Peter	Kings Langley			GB
Jayaweera-Bandara; Asoka M.	Long Ditton			GB
Duffin; Henry	Surbiton			GB

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
The Secretary of State for Defence in her Britannic Majesty's Government	London			GB		07

APPL-NO: 07/ 457681 [PALM]

DATE FILED: January 4, 1990

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
GB	8712834	June 1, 1987

PCT-DATA:

APPL-NO	DATE-FILED	PUB-NO	PUB-DATE	371-DATE	102(E)-DATE
PCT/GB88/00420	May 26, 1988	WO88/09784	Dec 15, 1988	Jan 4, 1990	Jan 4, 1990

INT-CL: [05] C07C 205/06

US-CL-ISSUED: 568/931; 568/928

US-CL-CURRENT: 568/931; 568/928

FIELD-OF-SEARCH: 568/931, 568/928

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>3505413</u>	April 1970	Shipp	568/931
<input type="checkbox"/>	<u>4243614</u>	January 1981	Gilbert	568/931
<input type="checkbox"/>	<u>4270012</u>	May 1981	Gilbert	568/931
<input type="checkbox"/>	<u>4626606</u>	December 1986	Duffin et al.	568/931

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0132990	February 1985	EP	

OTHER PUBLICATIONS

Chemical Abstracts, vol. 84, No. 9, Mar. 1, 1976, Abstract No. 58886n.
Chemical Abstracts, vol. 92, No. 18, May 5, 1980, Abstract No. 149476s.

ART-UNIT: 223

PRIMARY-EXAMINER: Stoll; Robert L.

ASSISTANT-EXAMINER: Sweet; Greg M.

ATTY-AGENT-FIRM: Nixon & Vanderhye

ABSTRACT:

A relatively fast process for producing HNS from trinitrotoluene (TNT) in high yield consists of oxidizing TNT with an oxidizing transition metal compound within a polar aprotic solvent having a weak base, such as an alkali metal carboxylate, dissolved therein. The amount of transition metal compound used is typically at least one mole per mole of TNT. An especially preferred transition metal compound for use in the present process is cupric chloride.

16 Claims, 0 Drawing figures

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